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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,118	05/23/2000	Paul Lapstun	NPA012US	9159

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Kia Silverbrook
Silverbrook Research Pty Ltd
393 Darling Street
Balmain,
AUSTRALIA

EXAMINER
JORGENSEN, LELAND R

ART UNIT	PAPER NUMBER
2675	5

DATE MAILED: 03/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/575,118	LAPSTUN ET AL.	
	Examiner	Art Unit	
	Leland R. Jorgensen	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Objections

1. Claim 24 objected to because of the following informalities: Claim 24 states that it is dependant on a system as claimed in claim 14. Claim 14 describes a method rather than a system. Appropriate correction is required. For purposes of examination, its is assumed that claim 24 is dependant on claim 16 rather than 14.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 - 3, 5, 7, 8, 15 – 18, 20, 22 - 24, 27 – 30, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Cass, USPN 5,692,073.

Claim 1

Claim 1 describes a method of enabling navigation of a directory including the following steps.

Printing List of Directory Entries. Claim 1 describes printing a document containing a list of directory entries. The directory entries correspond to at least one node of an index of the directory. At least one interactive element enables a user to indicate a request for further

directory information by interacting with the element using a sensing device which is adapted to transmit request data to a computer system. Cass describes printing 2200 a document 1100 containing a list of directory entries 1101, 1102. The directory entries correspond to at least one node of an index of the directory 420. At least one interactive element enables a user to indicate a request for further directory information by interacting with the element using a sensing device which is adapted to transmit request data 2200 to a computer system 100. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

Printing Further Directory. Claim 1 describes printing the further directory on a document. Cass describes printing the further directory 2272 on a document 1110, 1120. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

Claim 2

Further Directory Includes List of Entries. Claim 2 is dependant on claim 1 and adds that the further directory information includes a list of directory entries corresponding to at least one node of an index. Cass teaches a further directory information includes a list of directory entries corresponding to at least one node of an index. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

Claim 3

Moving to First, Previous, Next, or Last Node of Index. Claim 3 is dependant on claim 2 and adds that the interacting with the at least one user interactive element corresponds to an operation of moving to one of a first, previous, next, or last node in the index. Cass shows first, pervious, next, and last nodes in the sample directory, e.g. "Myna Bird," "Toucans" 1111, and "Parrots" 1112. Cass, figure 21.

Claim 5

Further Directory Information Includes Further Nodes. Claim 5 is dependant on claim 1 and adds that the further directory information includes a list of further nodes in the directory index. Cass teaches that the further directory information includes a list of further nodes in the directory index. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; and figures 2, 4, 5, 21 and 22.

Claim 7

Interactive Element Facilitates Searching of Directory. Claim 7 is dependant on claim 1 and adds the at least one user interactive element facilitates searching of the directory. Cass teaches that the at least one user interactive element facilitates searching of the directory. Cass, col. 11, lines 22 – 25.

Claim 8

Sensing Device Selects Individual Entry. Claim 8 is dependant on claim 1 and adds the step of using the sensing device to select an individual entry in the list. The selection is identified in the computer system to facilitate printing of details of the corresponding index node or directory object. Cass teaches the step of using the sensing device to select an individual entry in the list. The selection is identified in the computer system to facilitate printing of details of the corresponding index node or directory object 2210 - 2270. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

Claim 15

Monitoring Use of Sensing Device. Claim 15 is dependant on claim 1 and adds that the sensing device includes an identification code specific to a particular user and the method

includes monitoring use of the sensing device in the computer system. Cass describes retaining a retrievable record of the printed document. Cass, col. 18, line 66 - col. 19, line 6.

Claim 16

Claim 16 describes a system for enabling navigation of a directory. The system include the following parts.

Computer System with list of Directory Entries. Claim 16 describes a computer system for formatting a document with a list of directory entries corresponding to at least one node of an index of the directory and at least one user interactive element to enable a user to request further directory information. Cass teaches a computer system 100 for formatting a document 1100 with a list of directory entries 1101, 1102 corresponding to at least one node of an index of the directory and at least one user interactive element to enable a user to request further directory information. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 3, 4, 5, 21 and 22.

Printer. Claim 16 describes a printer for printing the document. Cass teaches a printer 104 for printing the document. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 3, 4, 5, 21 and 22.

Sensing Device. Claim 16 describes a sensing device for interacting with the element and transmitting request data to the computer system to facilitate the further information being sent from the computer system to the printer for printing in a further document. Cass teaches a sensing device for interacting with the element and transmitting request data to the computer system to facilitate the further information being sent from the computer system to the printer for

printing in a further document. Cass, col. 6, lines 20 – 24; col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 3, 4, 5, 21 and 22.

Claim 17

Further Directory Has Further Node. Claim 17 is dependant on claim 16 and adds that the further directory information includes a list of directory entries corresponding to at least one further node of an index. Cass teaches a further directory information includes a list of directory entries corresponding to at least one node of an index. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

Claim 18

Moving to First, Previous, Next, or Last Node. Claim 18 is dependant on claim 17 and adds that the element is associated with an operation of moving to one of a first, previous, next, or last node in the index. Cass shows first, pervious, next, and last nodes in the sample directory, e.g. "Myna Bird," "Toucans" 1111, and "Parrots" 1112. Cass, figure 21.

Claim 20

Further Directory Information Includes Further Nodes. Claim 20 is dependant on claim 16 and adds that the further directory information includes a list of further nodes in the directory. Cass teaches that the further directory information includes a list of further nodes in the directory index. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

Claim 22

Searching Function. Claim 22 is dependant on claim 16 and adds the element is associated with a search function to facilitate searching of the directory. Cass teaches that the at least one user interactive element facilitates searching of the directory. Col. 11, Cass, lines 22 – 25.

Claim 23

Sensing Device to Select Individual Entry. Claim 23 is dependant on claim 16 and adds that the sensing device is adapted to select an individual entry in the document. The computer system is arranged to send details of the corresponding index node or directory object to the printer for printing. Cass teaches using the sensing device to select an individual entry in the list. The selection is identified in the computer system to facilitate printing of details of the corresponding index node or directory object 2210 - 2270. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

Claim 24

Document Include Coded Data. Claim 24 is assumed to be dependant on claim 16 and adds that the document includes coded data indicative of an identify of the document and of the at least one interactive element. Cass teaches that the document may include coded data indicative of an identify of the document and of the at least one interactive element. Cass, col. 9, lines 27 – 33; and col. 11, lines 22 – 33.

Claim 27

Identification Code. Claim 27 is dependant on claim 16 and adds that the sensing device includes an identification code specific to a particular user and the computer system is

arranged to monitor the use of the sensing device. Cass describes using such system to keep track of a particular user. Cass, col. 17, lines 37 – 67.

Claim 28

Marking Nib. Claim 28 is dependant on claim 16 and adds that the sensing device includes a marking nib. Cass describes making marks on the documents. Cass, col. 17, lines 4 – 36.

Claim 29

Surface-Defining Structure. Claim 29 is dependant on claim 16 and adds that the document is printed on a surface of a surface-defining structure and the printer prints the document on demand. Cass describes printing the document out demand. Cass, col. 17, lines 4 – 36.

Claim 30

Printing the Coded Data. Claim 30 is dependant on claim 28 and adds that the printer is arranged to print the coded data at the same time as the printing the document on a surface-designing structure. Cass describes documents coded with machine-readable coded data such as data glyph or bar code. Cass, col. 11, lines 22 – 26. It is inherent that such coded data can be printed at the same time as the other printing on the document.

Claim 32

Retrievable Record. Claim 32 is dependant on claim 28 and adds a database for keeping a retrievable record of each document generated. Each document is retrievable by using its identity, as included in its coded data. Cass describes a database 520 for keeping a retrievable record of each document 521. Each document is retrievable by using its identity, as included in

its coded data. Cass, col. 10, line 12 – col. 11, line 5; col. 11, lines 15 –33; col. 17, lines 37 – 49.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass.

Claim 4

Double-Sided Page. Claim 4 is dependant on claim 2 and adds that the further directory information is printed on a double-sided page.

Cass does not specifically teach that the further directory information is printed on a double-sided page.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use a double-side page with Cass to increase the amount of volume of information available to the user. Cass invites one to consider such embodiments. Cass, col. 8, lines 8 –11.

Claim 19

Double-Sided Page. Claim 19 is dependant on claim 17 and adds that the further directory information is printed on a double-sided page.

Cass does not specifically teach that the further directory information is printed on a double-sided page.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use a double-side page with Cass to increase the amount of volume of information available to the user. Cass invites one to consider such embodiments. Cass, col. 8, lines 8 –11.

6. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass in view of Microsoft Computer Dictionary, 4th ed.

Claim 6

Moving to Parent, Child or Root Node of Index. Claim 6 is dependant on claim 5 and adds that interacting with the at least one user interactive element corresponds to an operation of moving to one of a parent, child or root node of the index.

Although Cass shows a parent/child relationship about the information in figure 21, Cass does not specifically state that the user interactive element corresponds to an operation of moving to one of a parent, child or root node of the index.

The Microsoft Computer Dictionary teaches a parent/child relationship in a file directory. Microsoft Computer Dictionary, p. 332.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the parent/child relationship to organize the index because such organization is an common, effective, and efficient method to organize directory information.

Claim 21

Moving to Parent, Child or Root Node. Claim 21 is dependant on claim 20 and adds wherein the element is associated with an operation of moving to one of a parent, child or root node of the index.

Although Cass shows a parent/child relationship about the information in figure 21, Cass does not specifically state that the user interactive element corresponds to an operation of moving to one of a parent, child or root node of the index.

The Microsoft Computer Dictionary teaches a parent/child relationship in a file directory. Microsoft Computer Dictionary, p. 332.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the parent/child relationship to organize the index because such organization is an common, effective, and efficient method to organize directory information.

7. Claims 9 – 14, 25, 26, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass in view of Dymetman et al, USPN 6,330,976 B1.

Claim 9

Document Include Coded Data. Claim 9 is dependant on claim 1 and adds that the document includes coded data indicative of an identify of the document and of the at least one interactive element. Cass teaches that the document includes coded data indicative of an identify of the document and of the at least one interactive element. Cass, col. 9, lines 27 – 33; and col. 11, lines 22 – 33.

Receiving Data from Sensing Device. Claim 9 adds the step of receiving, in the computer system, indicating data from the sensing device regarding the identity of the document and a position of the sensing device relative to the document in order to identify the document and determine when the sensing device is used to interact with the element.

Cass does not teach receiving indicating data from the sensing device about the position of the sensing device relative to the document.

Dymetman teaches receiving, in the computer document, indicating data from the sensing device regarding the identity (pid or pid') of the document and a position (loc or loc') of the sensing device relative to the document in order to identify the document and determine when the sensing device is used to interact with the element. Dymetman et al, col. 9, lines 16 – 22, figures 1 and 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the sensing device of Dymetman with the method of Cass. Cass invites such combination.

> The invention could be applied in an asynchronous mode to allow collection of bookmarks while reading a document such as a newspaper or magazine, after which the bookmarks could be used in a batch to retrieve email clippings or print additional information.

Dymetman, col. 35, lines 7 – 11. See also Dymetman, col. 2, lines 49 – 54; col. 3, lines 22- 38; and col. 35, lines 2 – 19.

Claim 10

Receiving Movement Data. Claim 10 is dependant on claim 9 and adds the step of receiving, in the computer system, movement data regarding movement of the sensing device relative to the document. Dymetman teaches receiving, in the computer system, movement data regarding movement of the sensing device relative to the document. Dymetman, col. 11, lines 28 – 43.

Claim 11

Sensing Device Senses Movement and Identifies Request. Claim 11 is dependant on claim 10 and adds that the sensing device senses its movement relative to the document using the coded data and identifying the request in the computer system from the movement being at least partially within a zone associated with the interactive element. Dymetman teaches that the sensing device senses its movement relative to the document using the coded data and identifying the request in the computer system from the movement being at least partially within a zone associated with the interactive element. Dymetman, col. 11, lines 28 – 43.

Claim 12

Document Printed at Same Time as Coded Data. Claim 12 is dependant on claim 9 and adds that the document is printed on a surface of a surface defining structure at the same time as the coded data is printed on the surface. Cass describes documents coded with machine-readable coded data such as data glyph or bar code. Cass, col. 11, lines 22 – 26. It is inherent that such coded data can be printed at the same time as the other printing on the document.

Claim 13

Coded Data Invisible in Visible Spectrum. Claim 13 is dependant on claim 9 and adds the step of printing the coded data to be substantially invisible in the visible spectrum. Dymetman teaches coded data that is substantially invisible in the visible spectrum. Dymetman, col. 11, line 46 – col. 12, line 28; col. 12, lines 59 – 67; and figure 4.

Claim 14

Retrievable Record. Claim 14 is dependant on claim 9 and adds the step of retaining a retrievable record of the printed document. The document is retrievable using the identify data

contained in the coded data. Cass teaches retaining a retrievable record of the printed document. The document is retrievable using the identify data contained in the coded data. Cass, col. 17, lines 37 – 49.

Claim 25

Receiving Data from Sensing Device. Claim 25 is dependant on claim 24 and adds that the computer system is adapted to receive movement data regarding movement of the sensing device relative to the document and interpret the movement of the sensing device as it related to the at least one element the sensing device, when moved relative to the document, sensing the data regarding the at least one element using at least some of the coded data and generating the data regarding its own movement relative to the document.

Cass does not teach receiving movement data from the sensing device about its position relative to the document.

Dymetman teaches receiving, in the computer document, indicating data from the sensing device regarding the identity (pid or pid') of the document and a position (loc or loc') of the sensing device relative to the document in order to identify the document and determine when the sensing device is used to interact with the element. Dymetman et al, col. 9, lines 16 – 22, figures 1 and 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the sensing device of Dymetman with the method of Cass. Cass invites such combination.

> The invention could be applied in an asynchronous mode to allow collection of bookmarks while reading a document such as a newspaper or magazine, after which the bookmarks could be used in a batch to retrieve email clippings or print additional information.

Dymetman, col. 35, lines 7 – 11. See also Dymetman, col. 2, lines 49 – 54; col. 3, lines 22- 38; and col. 35, lines 2 – 19.

Claim 26

Sensing Device Senses Movement. Claim 26 is dependant on claim 25 and adds that the sensing device senses its movement relative to the document using the coded data. Dymetman teaches that the sensing device senses its movement data relative to the document using the coded data. Dymetman, col. 11, lines 28 – 43.

Claim 31

Coded Data Invisible in Visible Spectrum. Claim 31 is dependant on claim 28 and adds the that the coded data is substantially invisible in the visible spectrum. Dymetman teaches coded data that is substantially invisible in the visible spectrum. Dymetman, col. 11, line 46 – col. 12, line 28; col. 12, lines 59 – 67; and figure 4.

8. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cass in view of Kobayashi et al, USPN 5,881,352.

Claim 33

Binding Means. Claim 33 is dependant on claim 16 and adds that the printer includes a binding means for binding the document in the event the document includes a plurality of pages.

Cass does not teach such binding means.

Kobayashi et al teaches a means for binding the document in the event the document includes a plurality of pages. Kobayashi, col. 1, lines 7 – 21.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the binder of Kobayashi with the system of Cass. Such combination provides easy binding of collected sheets and covers without manual labor. Kobayashi, col. 2, lines 36 – 48.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dymetman et al, USPN 6,345,304 B1, teaches how to obtain network addresses from identifiers.

Dougherty et al, USPN 6,076,734, teaches methods and systems for provided human and computer interface.

Kraft, IV, USPN 5,870,767, teaches a method and system for rendering hyper-link information in a printable medium from a graphical user interface.

Stork et al, USPN 5,781,914, teaches a method to convert documents with hyper-links between hardcopy and electronic format.

Zdybel, Jr. et al, USPN 5,486,686 teaches a hardcopy loss-less data storage and communication for electronic document processing systems.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leland Jorgensen whose telephone number is 703-305-2650. The examiner can normally be reached on Monday through Friday, 7:00 a.m. through 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven J. Saras can be reached on 703-305-9720.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, telephone number (703) 306-0377.

lrj
March 1, 2002

STEVEN SARAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600